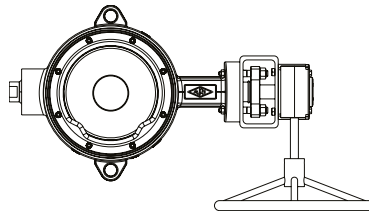


ARI-ZEDOX® - Fig. 121 - Butt weld ended high performance valve - Double offset

ARI-ZEDOX®
with worm gear

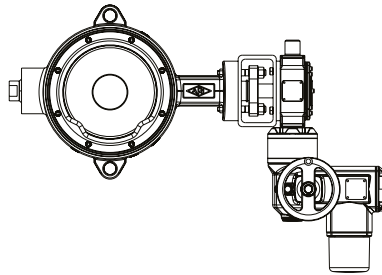


Page 4



Fig. 121 -
ARI-ZEDOX® butt weld ended

ARI-ZEDOX®
with electric rotary actuator
Auma

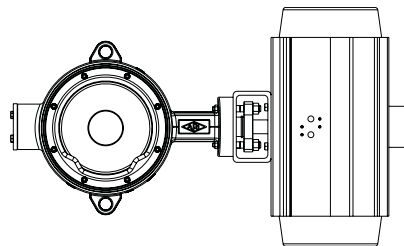


Page 5



DN200-DN900
honeycomb
shape disc

ARI-ZEDOX®
with pneumatic actuator



Page 6



DN1000-DN1600
Disc

ARI-ZEDOX®
with hydraulic actuator

on request

Features:

- Carbon steel / stainless steel body
- Double offset construction:
Rotary movement (90°) without wear or friction
- Metallic or PTFE+C sealing
- Bi-directional tightness
- Replaceable seat ring
- Fire Safe acc. to ISO 10497 / BS6755
- ATEX (optional)

Butt weld ended high performance valve (Cast steel, Stainless steel)

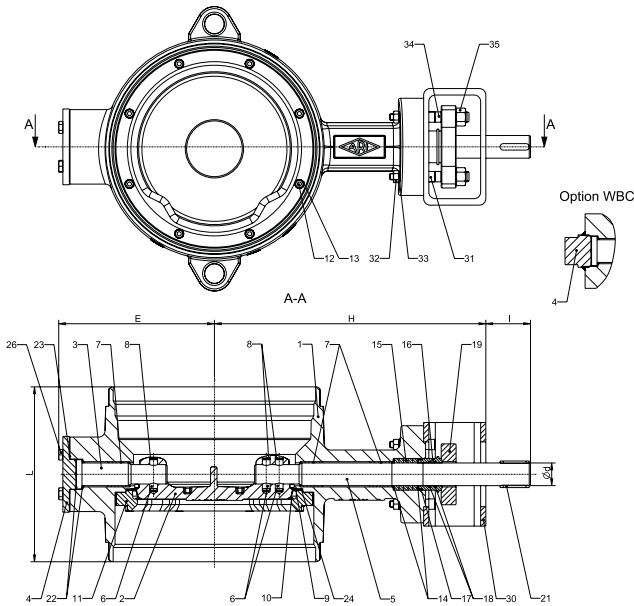


Figure	Nominal pressure	Material	Nominal diameter	Sealing element
31.121 ¹⁾	PN 6 - PN 10	1.0619+QT	DN 200-800	PTFE+C (TS)
			DN 200-1600	Stainless steel (CS)
32.121 ¹⁾	PN 16	1.0619+QT	DN 200-800	PTFE+C (TS)
			DN 200-1600	Stainless steel (CS)
34.121 ¹⁾	PN 25	1.0619+QT	DN 200-800	PTFE+C (TS)
			DN 200-1600	Stainless steel (CS)
51.121 ¹⁾	PN 6 - PN 10	1.4408	DN 200-800	PTFE+C (TS)
			DN 200-1600	Stainless steel (CS)
52.121 ¹⁾	PN 16	1.4408	DN 200-800	PTFE+C (TS)
			DN 200-1600	Stainless steel (CS)
54.121 ¹⁾	PN 25	1.4408	DN 200-800	PTFE+C (TS)
			DN 200-1600	Stainless steel (CS)

Face-to-face dimension series 14 acc. to DIN EN 12982
Standard: Bolted Bottom cover (BBC)
Optional: Welded Bottom cover (WBC)

¹⁾ Sales article (in order confirmation) over 34./54.121 in DN200-DN1600

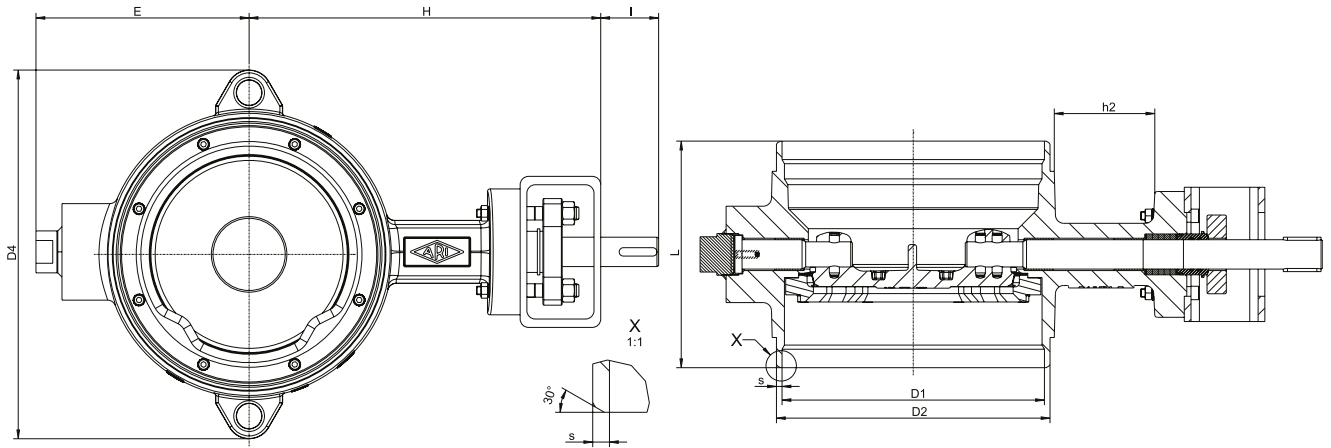
Sealing element:	
• PTFE+C (TS) ²⁾	-40°C to 180°C
• Stainless steel (CS)	-40°C to 260°C
• higher temperatures up to 400°C on request	
²⁾ Observe operating limits with sealing PTFE+C, refer to page 3	
Max. differential pressure:	
34.121	• 16 bar - standard
54.121	• 25 bar - option

Actuation arrangement:	
• Worm gear	• Pneumatic actuator
• Electric actuator	• Hydraulic actuator
Sealing leakage test:	
PTFE+C	• DIN EN 12266-1 Leakage rate A
Stainless steel	• DIN EN 12266-1 Leakage rate B

Options on request

Parts				
Pos.	Sp.p.	Description	Fig. 34.121	Fig. 54.121
1		Body	1.0619+QT	1.4408
2		Disc	1.4408 (optional 1.4460)	
3		Pivot	1.4021+QT	1.4542
4		Bottom cover	1.4404 (BBC), (optional WBC: 1.0565)	1.4404
5		Stem	1.4021+QT	1.4542
6		Pin	A4-70	
7		Bushing	P1	Inconel 625
8		Retaining ring	1.4122+QT	
9 / 24	x	Shim ³⁾	978-C / SIGRAFLEX HIGH PRESSURE (SIGRAFLEX HIGH PRESSURE for steam version)	
10	x	Seat ring	CS: 1.4404 (optional: 1.4539) TS: PTFE+C; special material on request	
11		Retaining ring	1.0425	1.4404
12		Socket screw	A4-80	
13		Washer	A4	
14		Back-up-ring	1.4404	
15	x	Box packing	Graphite	
16		Shaft seal bushing	1.4404	
17 / 18	x	O-ring	EPDM / FPM (not fitted in steam version)	
19		Gland	1.4404	
21		Key	A4	
22		Axial-washer	P1	Inconel 625
23	x	Shim	978-C / SIGRAFLEX HIGH PRESSURE (SIGRAFLEX HIGH PRESSURE for steam version)	
26		Hexagon srew	A4-70	
30		Mounting bracket	1.0576 (galvanized)	
31		Socket srew	A4-70	
32		Hexagon nut	A4-70	
33		Retaining washers pair	A4	
34		Stud	A4-70	
35		Hexagon nut	A4-70	
L Spare parts				

³⁾ Only for CS-version
Information / restriction of technical rules need to be observed!
The engineer, designing a system or a plant, is responsible for the selection of the correct valve.
Resistance and suitability must be verified (contact manufacturer for information, refer to Product overview).
TS = PTFE+C (Teflon) seal and Stainless steel disc
CS = Chromed seating and Stainless steel disc



DN	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------

Face-to-face dimension series 14 acc. to DIN EN 12982																
L	(mm)	230	250	270	290	310	330	350	390	430	470	510	550	630	710	790

Dimensions																
D1 (DIN end)	(mm)	210,1	263,0	312,7	344,4	393,8	444,4	495,4	593,6	693,6	795,2	894,4	994,0	1195	1392	1592
D2 (DIN end)	(mm)	219,1	273,0	323,9	355,6	406,4	457,0	508,0	609,6	711,2	812,8	914,4	1016	1220	1420	1620
s (DIN end)	(mm)	4,5	5	5,6	5,6	6,3	6,3	6,3	8	8,8	8,8	10	11	12,5	14	14
D4	(mm)	233	385	435	465	540	590	660	760	860	955	1070	1200	1440	1770	1918
Ød	(mm)	25	30	35	40	40	50	50	60	70	70	90	100	140	170	170
E	(mm)	179	218	254	280	324	354	379	404	468	519	606	660	835	977	1077
H	(mm)	335	394	419	449	505	541	568	664	746	847	914	960	1077	1272	1372
h2	(mm)	115	125	125	125	155	149	149	178	181	183	194	183	182	206	206
l	(mm)	58	63	69	75	75	86	86	103	119	119	125	130	160	180	165
Flange ISO 5211		F10	F12	F12	F14	F14	F16	F16	F16	F25	F30	F30	F30	F35	F40	F40

Weights for butt weld ended high performance valve																	
1.0619+QT	Fig. 34.121	(kg)	42	61	81	107	150	192	229	361	511	628	950	1280	2200	2690	4946
1.4408	Fig. 54.121	(kg)															

Pressure-temperature-ratings		Intermediate values for max. permissible operational pressure can be determined by linear interpolation of the given temperature / pressure chart.										
acc. to manufacturers standard	PN	-40 °C to < -10 °C			-10 °C to 50 °C			120 °C	150 °C	200 °C	250 °C	260 °C
1.0619+QT	10 (bar)	10			10			9,2	8,8	8,3	7,6	7,5
1.0619+QT	16 (bar)	16			16			16	15,3	14	13	12,6
1.0619+QT	25 (bar)	25			25			25	23,9	22	20	19,4
acc. to DIN EN 1092-1	PN	-40 °C to < -10 °C			-10 °C to 100 °C			150 °C	200 °C	250 °C	260 °C	
1.4408	10 (bar)	10			10			9	8,4	7,9	7,8	
1.4408	16 (bar)	16			16			14,5	13,4	12,7	12,5	
1.4408	25 (bar)	25			25			22,7	21	19,8	19,5	

Operating limits sealing element ¹⁾		Intermediate values for max. differential pressure can be determined by linear interpolation of the given temperature / pressure chart.									
Sealing PTFE+C (TS)		-40 °C	0 °C	50 °C	100 °C	120 °C	150 °C	180 °C	200 °C	250 °C	260 °C
		25	25	25	25	25	14,5	4	-	-	-

¹⁾ Note additional restrictions of the pressure-temperature-ratings!

DN	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
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Max. differential pressure																
Sealing PTFE+C (TS)	Disc Side	(bar)	25	25	25	25	16	16	16	16	16	-	-	-	-	-
	Shaft Side	(bar)	25	25	25	25	25	16	16	16	16	16	-	-	-	-
	Bi-directional	(bar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sealing stainless steel (CS)	Disc Side	(bar)	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	Shaft Side	(bar)	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	Bi-directional	(bar)	25	25	25	25	25	25	25	25	25	25	25	25	25	25

Operation torque for max. differential pressure 16 bar (bi-directional flow)																	
PN 25 ²⁾	Sealing PTFE+C	Torque ³⁾	(Nm)	190	320	550	850	1300	1800	2400	3400	5500	-	-	-	-	auf
	Sealing stainless steel		(Nm)	240	400	700	1100	1600	2200	3000	4200	6800	10000	13000	16000	24000	34000

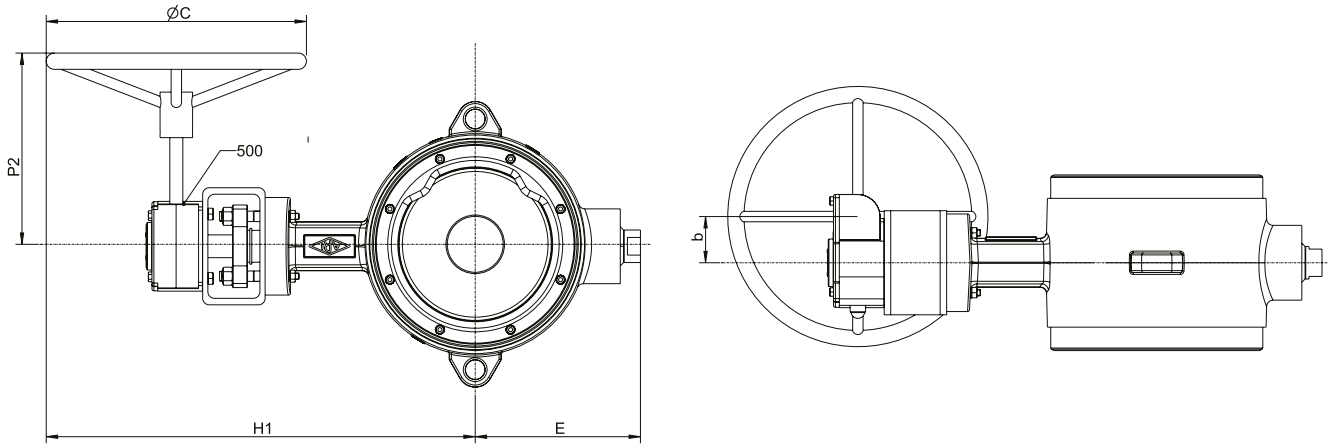
²⁾ max. differential pressure 16 bar!

³⁾ for steam duty use the next size up

ZEDOX® Butt weld ended high performance valve with worm gear

Opening and closing of the valves with the handwheel.

The position of the disc can be seen on a position indicator on top of the gear.



Parts			
Pos.	Sp.p.	Description	Fig. 34./54.121
500	x	Worm gear	
	L Spare parts		

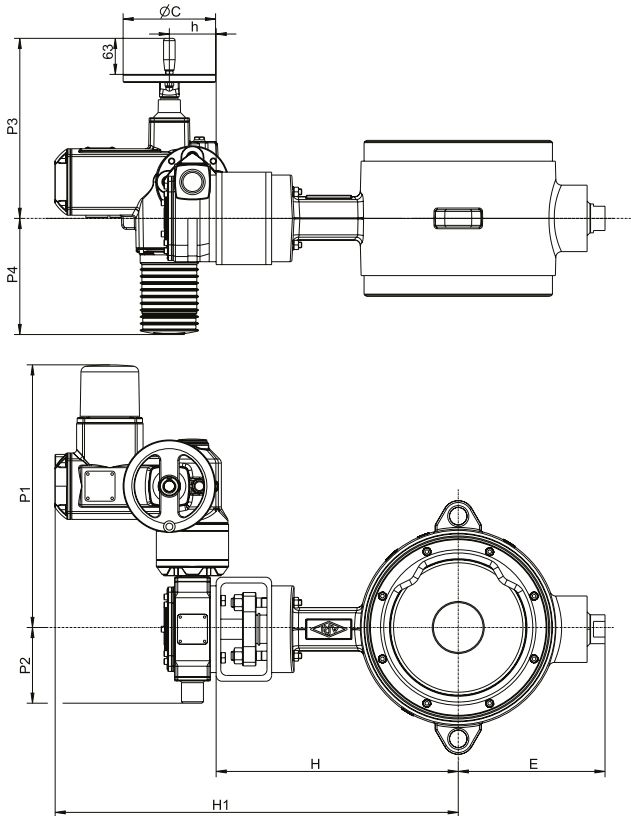
DN	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
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Dimensions															
b	(mm)	71	71	71	86	86	53	53	53	182	182	182	182	209	on request
ØC	(mm)	200	300	400	400	500	500	500	500	500	500	500	500	600	
E	(mm)	179	218	254	280	324	354	379	404	468	519	606	660	835	
H1	(mm)	476	585	660	691	797	847	874	970	1055	1156	1223	1269	1462	
P2	(mm)	249	284	297	285	305	348	348	348	470	470	470	470	491	
Type of gear		AB550N	AB550N	AB550N	AB880N	AB880N	AB2000N	AB2000N	AB2000N	AB6800N-PR4	AB6800N-PR4	AB6800N-PR6	AB6800N-PR6	A200N-PR10	

Weights with manual gear Rotork ¹⁾																
1.0619+QT	Fig. 34.121	(kg)	52	72	93	124	168	220	257	389	577	694	1018	1348	2339	on request
1.4408	Fig. 54.121	(kg)														

¹⁾ Gewicht des Handrades ist nicht enthalten

ZEDOX® Butt weld ended high performance valve with electric rotary actuator Auma

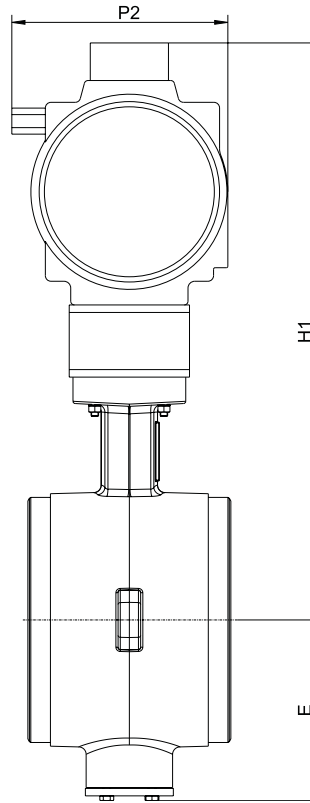
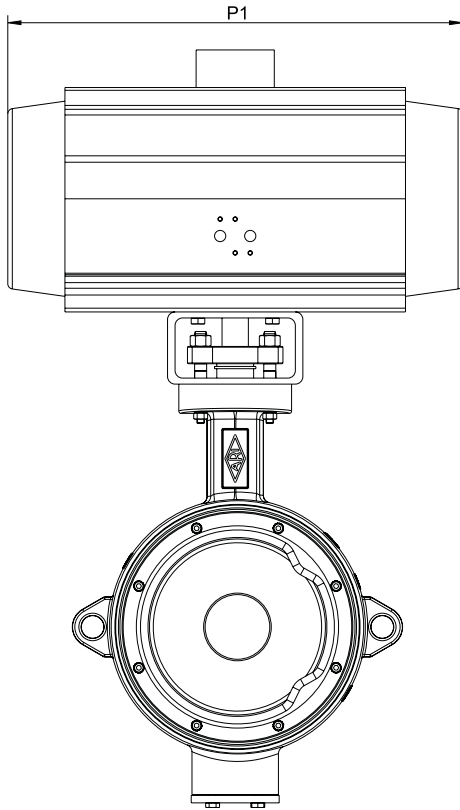


DN	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------

Dimensions																
ØC	(mm)	160	160	160	200	200	160	160	200	200	160	160	160	200	200	on request
E	(mm)	176	218	254	280	324	354	379	404	468	519	606	660	835	977	
h	(mm)	80	85	85	107	107	115	115	125	125	130	130	130	180	195	
H	(mm)	335	394	419	449	505	541	568	664	746	847	914	960	1077	1272	
H1	(mm)	613	677	702	754	810	854	881	987	1069	1175	1242	1288	1455	1665	
P1	(mm)	388	413	413	420	420	547	547	554	554	698	698	758	860	670	
P2	(mm)	98	128	128	133	133	189	189	194	194	331	331	420	455	552	
P3	(mm)	299	312	312	334	334	349	349	379	379	409	409	449	504	569	
P4	(mm)	215	202	202	203	203	165	165	158	158	175	175	208	258	340	
Type of actuator PN 25 max. differential pressure 16 bar, for CS- and TS-version		SA07.2-GS50.3 (51:1)- F10	SA07.6-GS63.3 (51:1)- F12	SA07.6-GS63.3 (51:1)- F12	SA10.2-GS80.3 (53:1)- F14	SA10.2-GS80.3 (53:1)- F14	SA07.6-GS100.3 (208:1)- F16	SA07.6-GS100.3 (208:1)- F16	SA10.2-GS125.3 (208:1)- F16	SA10.2-GS125.3 (208:1)- F25	SA07.6-GS160.3 (880:1)- F30	SA07.6-GS160.3 (880:1)- F30	SA07.6-GS200.3 (864:1)- F30	SA10.2-GS250.3 (848:1)- F35	SA10.2-GS315 (1696:1) F40	
Output drive	1/min	22	22	22	22	22	45	45	45	45	90	90	63	63	125	
Operating time	s/90°	35	35	35	36	36	69	69	69	69	147	147	206	202	204	

Weights with electric actuator																	
1.0619+QT	Fig. 34.121	(kg)	69	94	114	148	191	252	289	432	582	740	1062	1471	2533	3345	on request
1.4408	Fig. 54.121	(kg)															

ZEDOX® Butt weld ended high performance valve with pneumatic rotary actuator AIR-TORQUE



Type of actuator	P1 (mm)	P2 (mm)
SC00450	394,5	166
SC00600	422,5	181
SC00900	474	200
SC01200	528	221,5
SC02000	605	262
SC03000	710	330
SC04000	812	371
SC05000	855	418
SC10000	950	528

DN	200	250	300	350	400	450	500	600
----	-----	-----	-----	-----	-----	-----	-----	-----

Dimensions									
E	(mm)	179	218	254	280	324	354	379	404
H1 ¹⁾	(mm)	606	689	768	882	965	1139	1166	1262
Type of actuator for max. differential pressure 16 bar ²⁾									
Spring closes flow from disc side actuating pressure actuator 5 bar	TS	SC00600-5/6	SC01200-5	SC02000-5	SC3000-5	SC4000-5/6	SC10000-4	SC10000-4/5	on request
	CS	SC00900-5	SC01200-5/6	SC02000-5/6	SC4000-5	SC05000-5/6	SC10000-4	SC10000-5/6	
Spring closes flow from disc side actuating pressure actuator 6 bar	TS	SC00600-5/6	SC01200-5	SC02000-5	SC3000-5	SC4000-5/6	SC05000-6	SC10000-4/5	
	CS	SC00900-5	SC01200-6	SC02000-6	SC4000-5	SC05000-5/6	SC10000-4	SC10000-5/6	
Spring closes flow from shaft side actuating pressure actuator 5 bar	TS	SC00600-4/5	SC00900-5/6	SC02000-4	SC03000-4	SC04000-4/5	SC05000-5	SC10000-4	SC10000-5/6
	CS	SC00600-5/6	SC001200-5	SC02000-5	SC03000-5/6	SC04000-5/6	SC10000-4	SC10000-4/5	on request
Spring closes flow from shaft side actuating pressure actuator 6 bar	TS	SC00450-6	SC00900-5/6	SC02000-4	SC02000-6	SC04000-4/5	SC05000-5	SC10000-4	SC10000-5/6
	CS	SC00600-5/6	SC001200-5	SC02000-5	SC03000-5/6	SC04000-5/6	SC05000-6	SC10000-4/5	on request

Weights with pneumatic actuator ¹⁾										
1.0619+QT	Fig. 34.121	(kg)	74	103	148	252	312	419	456	588
1.4408	Fig. 54.121	(kg)								

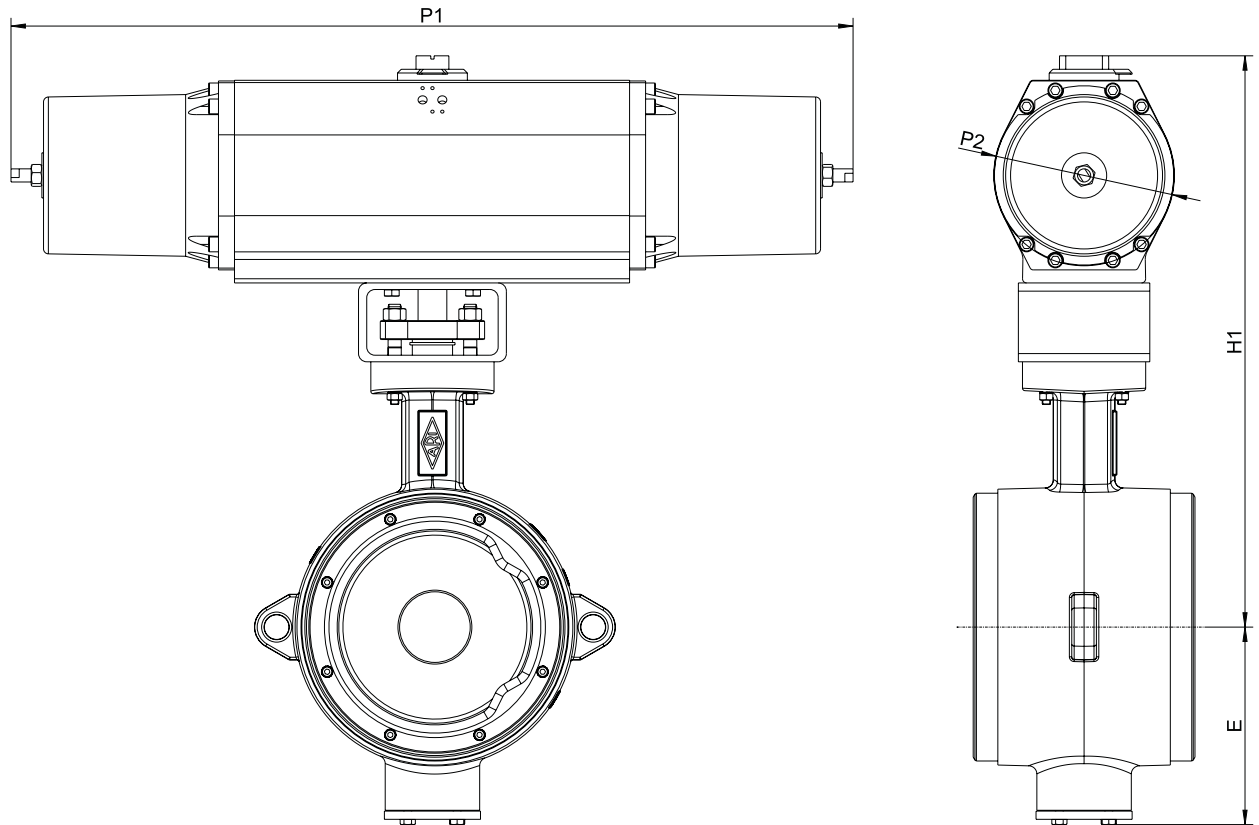
For steam duty use the next actuator up

¹⁾ with largest actuator option

²⁾ other differential pressures on request

Actuator bigger than DN 600 on request

ZEDOX® Butt weld ended high performance valve with pneumatic actuator Rotork RC



DN	200	250	300	350	400 ²⁾	450 ²⁾	500 ²⁾
----	-----	-----	-----	-----	-------------------	-------------------	-------------------

Dimensions							
E	(mm)	on request					
H1	(mm)						
P1	(mm)						
P2	(mm)						
Type of actuator spring closes ¹⁾							
Type of actuator double acting ¹⁾							

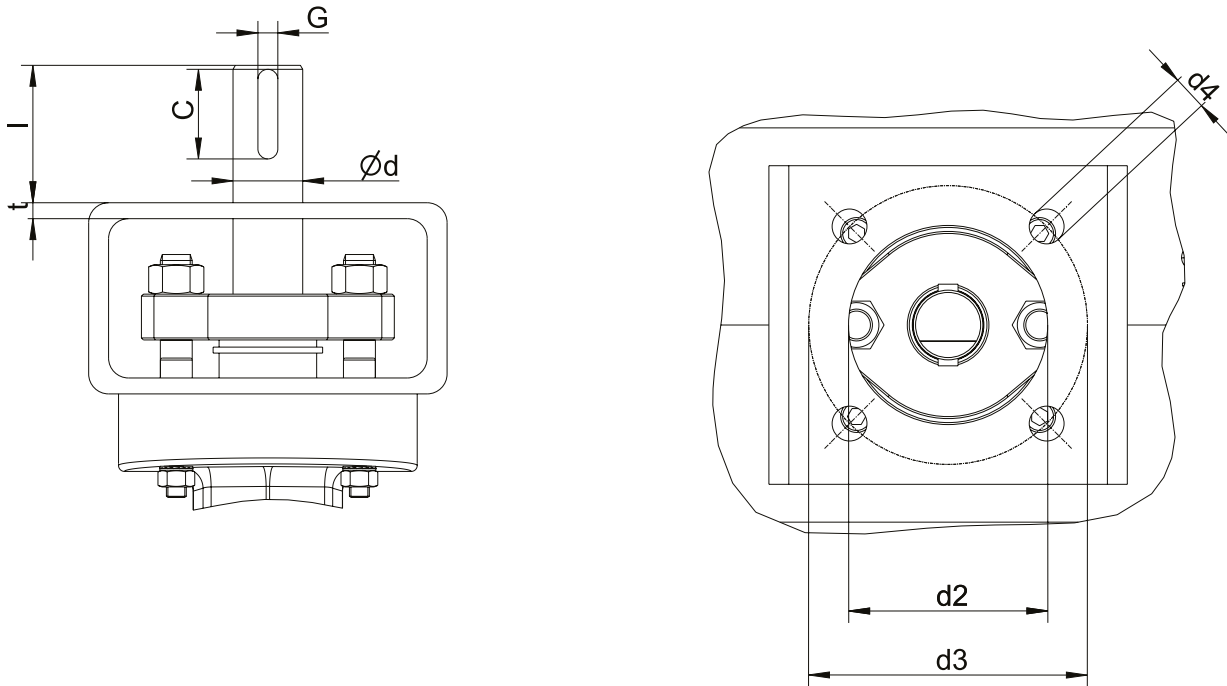
Weights with pneumatic actuator						
1.0619+QT	Fig. 34.121	(kg)	on request			
1.4408	Fig. 54.121	(kg)				

¹⁾ at air pressure 6 bar

²⁾ Δ P max = 16 bar

Actuator bigger than DN 500 on request

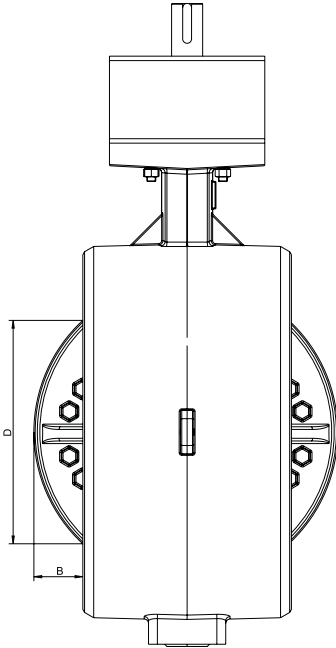
Actuator flange connection, with 2 parallel keys 180° rotated



DN		200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
Connection EN ISO 5211		F10	F12		F14		F16			F25	F30		F35	F40		
Ød (stem diameter)	(mm)	25	30	35	40	50	50	65	70	70	90	100	140	170		
d2 (inside diameter)	(mm)	70	85		100	130			200	230		260	300			
d3 (screw-hole circle diameter)	(mm)	102	125		140	165			254	298		356	406			
n x d4 (Number x hole-Ø)	(mm)	4x10,5	4x13,5		4x17,5		4x22			8x17,5		8x22		8x33	8x39	
C (parallel key length)	(mm)	45	45	45	50	63	63	90	110	110	125	125	100	110		
G (parallel key width)	(mm)	8	8	10	12	14	14	18	20	20	25	28	36	40		
l (bare stem length)	(mm)	58	63	69	75	86	86	103	119	119	125	130	160	165		
t (mounting bracket wall thickness)	(mm)	8	8	8	8	8	8	8	8	14	11	11	11	12	12	27

Kvs-value / Zeta-value		200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
DN																
Kvs-value	(m³/h)	775	1522	2862	4444	6413	9690	14430	16200	22160	28360	36180	39000	58000	85000	-
Zeta-value	--	4,26	2,70	1,58	1,21	1,00	0,70	0,48	0,79	0,78	0,81	0,80	1,05	0,98	0,85	-

Difference between disc outside-diameter and face-to-face		200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
DN																
B	(mm)	-	-	-	2	21	32	48	52	81	111	138	152	217	267	327
D	(mm)	-	-	-	38	161	213	273	299	404	504	595	655	854	1018	1204





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ARI-ZEDOX®
Butt weld ended high performance valve



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